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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/070,100	05/20/2002	Manfred Ernst Jans	1843-1	9556

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EXAMINER

REIFSNYDER, DAVID A

ART UNIT	PAPER NUMBER
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1723

DATE MAILED: 10/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/070,100	Applicant(s) JANS, MANFRED ERNST	
	Examiner David A Reifsnnyder	Art Unit 1723	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 July 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>20020729</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters 3, 3a and 3b appear to have all been used to designate the same type of ring magnet. Furthermore, reference characters 5 and 6 may have been used to designate the same piece. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character 4 appears to have been used to designate both a 3 mm thick spacer disc and a 6 mm spacer disc. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

The following is a quotation of 37 CFR 1.71(a):

- (a) The specification must include a written description of the invention or discovery and of the manner and process of making and using the same, and is required to be in such full, clear, concise, and exact terms as to enable any person skilled in the art or science to which the invention or discovery appertains, or with which it is most nearly connected, to make and use the same.

The specification is objected to under 37 CFR 1.71 (a) because the specification fails to teach how “connecting pieces 5” and “inner tube 6”, which are first discussed in paragraph [0011] can be formed in one piece. Furthermore, if “connecting pieces 5” and

"inner tube 6" are really one piece then that piece would only have one reference number. Furthermore, the recitation in paragraph [0012] of the specification that "The stack of ring magnets 3 which are all alike.." is confusing because if the ring magnets have the same reference number, and in this case the number is "3" then they have to be all alike. In addition, the specification states in paragraph [0012] that the single ring magnets 3a, 3b, form twinned ring magnets; however, the specification fails to disclose how magnets 3a, and 3b differ from ring magnets 3. It is believed that magnets 3, 3a and 3b are all the same magnets, and only one reference number is allowed per same element. In addition, paragraph [0012] teaches "a thicker spacer disk 4", and paragraph [0013] teaches that spacer disks 4 have an axial dimension of 3 mm while the thicker spacer disk 4 has an axial dimension of 6 mm. Therefore, the thicker spacer disc 4 is a different element then spacer disc 4, and requires a different reference number, or at least a different notation such as thick spacer disk 4a.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-11 are rejected under 35 USC 112, 1st paragraph for the reasons given above in the objections under 37 CFR 1.71.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 1-11; the use of reference numerals in parenthesis throughout the claims makes the claims confusing; therefore, the reference numerals should be deleted from the claims.

Regarding claim 1; claim 1 is vague and indefinite as to what the applicant intends to claim and should be revised carefully. Furthermore, the recitation of "the longitudinal axis" (thrice), "the inner wall", "the ends", "the liquid-free space", "the liquid inlet (E)", "the inlet" "the polarity inverted form one to the next", "the preceding ring magnet", "the following twined ring magnet" and "the inner diameter of the inner tube" all lack antecedent basis. In addition, it is vague and indefinite as to whether the claimed "means for causing a spiral motion" is the same means or a different means then the instantly claimed "strip (7)" Lastly, the grammar in claim 1 is so poor that it is impossible to determine what the applicant intends to claim in claim 1. In addition to the noted problems claim 1 needs to be carefully revised.

Regarding claim 2; the recitation of "the end sleeves" lacks antecedent basis. Furthermore, it is vague and indefinite as to what kind of steel is a "special steel".

Regarding claim 3; the recitation of "the last spacer disc" lacks antecedent basis.

Regarding claim 4; the recitation of "special steel" is vague and indefinite as to kind or steel is a "special steel".

Regarding claim 5; the recitation of "the outwardly" lacks antecedent basis.

Regarding claim 6; the recitation of " said helically wound strip is smooth or comprised of projections which serve to crate turbulence" is vague and indefinite as to exactly what claim limitation the applicant intends for the helically wound strip.

Regarding claim 7; the recitation of "said helix-free diametrical terminal section (8)" lacks antecedent basis, because reference number (8) was previously called "end sections (8)". Furthermore, the recitation of " with rounded straight edges" does not make sense.

Regarding claim 8; the recitation of at least edges (14a, 12a) of tips (14,12) of the strip (7) does not makes sense. Furthermore, while reference numbers are never desired in US practice the use of two reference numbers to define the same element does not make any sense.

Regarding claim 10; the recitation of "the flow section" and "the outlet section" both lack antecedent basis.

Regarding claim 11; the recitation of "said terminal outer part" lacks antecedent basis.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Fletcher who discloses a magnetic fluid treatment device including all of the features that are clearly claimed in claims 1-11. (see figs. 1-3 and col. 4, line 66 to col. 5, line 31).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over DE 195 32 357 A1 in view of Fletcher.

Regarding claims 1-11; DE 195 32 357 A1 discloses a magnetic fluid treatment device including all of the features that are clearly claimed in claims 1-11, except for the instantly claimed helical strip. Fletcher discloses that in the magnetic fluid treatment field it is known to have a helical strip inside a central fluid flow channel, to create a helical fluid flow pattern in the channel. It is considered that it would have been obvious to one having ordinary skill in the art at the time of the invention to have include a helical strip in the central flow channel of DE 195 32 357 A1's magnetic fluid treatment device as taught by Fletcher to create a helical fluid flow pattern in the central flow channel. Furthermore, a helical flow pattern in DE 195 32 357 A1's magnetic fluid treatment device would better treat the fluid that goes through DE 195 32 357 A1's magnetic fluid treatment device.

Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schoepe in view of Fletcher.

Regarding claims 1-11; Schoepe discloses a magnetic fluid treatment device including all of the features that are clearly claimed in claims 1-11, except for the instantly claimed helical strip. Fletcher discloses that in the magnetic fluid treatment field it is known to have a helical strip inside a central fluid flow channel, to create a helical fluid flow pattern in the channel. It is considered that it would have been obvious to one having ordinary skill in the art at the time of the invention to have include a helical strip in the central flow channel of Schoepe's magnetic fluid treatment device as taught by Fletcher to create a helical fluid flow pattern in the central flow channel. Furthermore,


a helical flow pattern in Schoepe's magnetic fluid treatment device would better treat the fluid that goes through Schoepe's magnetic fluid treatment device.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David A Reifsnyder whose telephone number is (703) 308-0456. The examiner can normally be reached on M-F 9:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda M Walker can be reached on (703) 308-0457. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-3601.


David A Reifsnyder
Primary Examiner
Art Unit 1723

DAR